UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/427,180	10/26/1999	JEAN-PAUL ACCARIE	1807.0804	2855

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EXAMINER
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ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/427,180	ACCARIE, JEAN-PAUL
	Examiner	Art Unit	
	Tri H. Phan	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2005*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,13,17,29,58 and 60-65* is/are pending in the application.

   4a) Of the above claim(s) *2-12,14-16,18-28,30-57 and 59* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1,13,17,29,58 and 60-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *7/25/2003* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment/Arguments

1.   This Office Action is in response to the Response/Amendment filed on January 13th,

2005. Claims 2-12, 14-16, 18-28, 30-57 and 59 are now canceled and new claims 61-65 are

added. Claims 1, 13, 17, 29, 58 and 60-65 are now pending in the application.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 1, 13, 17, 29, 58, 60 and 64 are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Lo et al.** (U.S.6,324,178; hereinafter refer as 'Lo') in view of **Ludtke et al.**

(U.S.6,233,611; hereinafter refer as '**Ludtke**').

        - In regard to claims 1 and 17, Lo discloses in Figs. 2A, 3A-B, 4 and in the respective portions of

the specification that the *bridge* ("bridge device" in Figs. 2 and 4) *and method for communicating digital*

information of different data formats between communication units able to communicate by at least one of

the data formats (For example see Fig. 2A; col. 4, line 47 through col. 5, line 35), *which comprise the*

reception operation of receiving digital information having the first format ("IEEE 1394 communication

standard"; For example see col. 6, lines 16-24) *transmitted via the first communication channel* ("IEEE

1394 communication bus and domain") *from the communication unit* ("nodes 210-218" in Fig. 2A) *that*

uses the first format (For example see Figs. 2A, 3A; col. 4, lines 47-64), *the determination operation*

("read section in data payload") *of determining at least a need to reformat received digital information*

having the first format according to resources available ("nodes' destination addresses") *on the second*

communication channel ("Ethernet communication bus and domain")(For example see Figs. 5, 7; col. 8,

lines 32-43; col. 9, line 66 through col. 10, line 11), *the transmission operation of transmitting the digital*

information having the second format via the second channel (For example see col. 5, line 62 through col.

6, line 8). Lo does disclose about the *reformat operation of reformatting the received digital information*

having the first format, to digital information having the second format different from the first format (For

example see col. 8, lines 32-43; col. 9, line 66 through col. 10, line 11) *and selected among a plurality of*

second formats, if a need is determined, in order to provide a minimum service of reformatting the

received digital information (For example see col. 6, lines 1-15; wherein the optimizing data transfers are

selected from different types communication standards disclosed in col. 1, lines 16-52); but fails to

explicitly disclose about the *"determination operation for determining the bandwidth allocation"* on the

second communication channel in order to provide a minimum service of reformatting the received digital

information. However, such implementation *"determination operation for determining bandwidth*

allocation operation" is known in the art.

    For example, **Ludtke** discloses in Fig. 4 and in the respective portions of the specification that

about the media manager for providing data flow management (For example see col. 13, lines 18-23; col.

9, lines 26-33; wherein, it is obvious that the data flow management of the media manager and the

supporting for resource sharing/resource queuing provided by the device control module 'DCM' are the

"determination operation for determining the bandwidth allocation" on the network) and other services

(For example see col. 6, lines 14-18) and the need to be converted from one into another format of data

transfer operations between the devices on the network, e.g. IEEE 1394-1995 standard, (For example see

Abstract; col. 2, lines 14-41).

Thus it would have been obvious to the person of ordinary skill in the art at the time of the

invention was made to combine the invention as taught by **Ludtke**, by implement the device control

module with the media manager and application program instructions as disclosed in Col. 4, Lines 12-67

into the program's instructions in **Lo**'s system as disclosed in Col. 7, Lines 28-38; with the motivation

being to improve the ability to provide data flow management, services for client applications between

devices on the network transfer data with different data formats between domains and protocols as

disclosed in **Ludtke**: col. 2, lines 1-10..

- Regarding claim 13, in addition to features in base claim 1 (see rationales pertaining the

rejection of base claim 1 discussed above), the combination of **Lo** and **Ludtke** fails to explicitly disclose

wherein *if the digital information having the first format is transmitted in the isochronous mode, the*

digital information having the second format is transmitted in asynchronous mode, and if the digital

information having the first format is transmitted in the asynchronous mode, the digital information

having the second formation is transmitted in the isochronous mode . However, **Lo** does discloses about

the transmission data between nodes through the bridge circuit with different data formats, wherein the

nodes in the first communication domain could be compatible with the IEEE 1394 standard or any

communication standard and the nodes in the second communication domain could be compatible with

the Ethernet IEEE 802.3 standard or any communication standard (For example see Figs. 4, 8A-B; col. 4,

line 47 through col. 5, line 35; col. 6, lines 1-8; and wherein, it is obvious that the IEEE 1394

communication bus can support both *"isochronous"* and *"asynchronous"* format data transfer modes).

Thus it would have been obvious to the person of ordinary skill in the art at the time of the

invention was made to implement the first communication domain's format in the *"isochronous mode"*

and the second communication domain's format in the *"asynchronous mode"*, or vice versa, as specific

designed choices in selected format and mode between different domains with different communication

standards.

- In regard to claims 29 and 64, in addition to features in base claims 1 and 17 (see

rationales pertaining the rejection of base claims 1 and 17 discussed above), **Lo** also discloses

about the *bridge that conforms with IEEE 1394.1 standard* (For example see Figs. 2A, 4; col. 7, lines 39-

53).

- Regarding claims 58 and 60, in addition to features in base claims 1 and 17 (see

rationales pertaining the rejection of base claims 1 and 17 discussed above), **Lo** further discloses

wherein the *reformat operation is the encryption operation of encrypting the digital information having*

the first format in order to form the digital information having the second format (For example see col. 6,

lines 1-15; wherein the bridge circuit disassembles and reassembles the data frame format to encapsulate

the data payload with the corresponding format of the particular domain as disclosed in Figs. 6 and 8A-

C).

Response to Amendment/Arguments

4.   Applicant's arguments filed on January 13th, 2005 have been fully considered but they are

not persuasive.

In response to applicant's argument that the combination of **Lo** and **Ludtke** fails to disclose about

the *"determination operation of determining a need to reformat received digital information having the*

first format according to resources available on the second communication channel" and about the

"reformat operation of reformatting the received digital information having the first format, to digital information having the second format different from the first format and selected among a plurality of second formats, if a need is determined". Examiner respectfully disagrees. Different types of data packet formats of different communication standards and domains (For example see **Lo**: Figs. 6 and 8A-B for Ethernet data packet, generic/asynchronous IEEE 1394 data packet; wherein the size and the transmission rate are different from one protocol to another protocol) are not compatible from one to another (For example see **Lo**: col. 1, lines 16-52); therefore, *"a need to reformat"* the data packet is required. The data payload section reads the destination address of the nodes, e.g. *"resources available on the second communication channel"*, and determines whether the translation is required to perform or not, e.g. reformat, (*"a need to reformat"* the data packet is required or not; For example see **Lo**: col. 8, lines 32-43; col. 9, line 66 through col. 10, line 11) and where the bridge circuit for optimizing data transfers between different data frame formats (For example see col. 6, lines 1-15) and the format is selected from different types communication standards as disclosed in col. 1, lines 16-52, e.g. *"selected among a plurality of second formats, if a need is determined"*. **Ludtke** also discloses about the media manager's determination for the need to convert format between the source and receiving nodes (*"a need to reformat"*; For example see **Ludtke**: col. 3, lines 30-35).

Applicant's argument that the combination of **Lo** and **Ludtke** fails to disclose about the *"determination operation for determining a bandwidth allocation on the second communication channel in order to provide the minimum service of reformatting the received digital information"*. Examiner respectfully disagrees. **Lo** does disclose in col. 6, lines 1-15; about the optimizing data transfers are selected from different types communication standards as disclosed in col. 1, lines 16-52, e.g. *"providing the minimum service of reformatting the received digital information and selecting the reformat among a plurality of second formats"*; but fails to disclose about the *"determining the bandwidth allocation"*. **Ludtke** discloses about the media manager for providing data flow management (For example see col.

13, lines 18-23; col. 9, lines 26-33) wherein, it is obvious that the data flow management of the media

manager and the supporting for resource sharing/resource queuing provided by the device control module

'DCM' are the "*determination operation for determining the bandwidth allocation*" on the network and

other services (For example see **Ludtke**: col. 6, lines 14-27). Therefore, Examiner concludes that the

combination of **Lo** and **Ludtke** teaches the arguable features.

In response to applicant's argument that there is no suggestion to combine the references, the

examiner recognizes that obviousness can only be established by combining or modifying the teachings of

the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to

do so found either in the references themselves or in the knowledge generally available to one of ordinary

skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958

F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, **Ludtke** discloses about the application

program, wherein the media manager provides the data flow management and other services and the

device control module 'DCM' supports for the resource sharing/resource queuing on the local or remote

nodes of the IEEE 1394 network. **Lo** discloses about the program for efficient data transfers of bridge

circuit between domains of different data formats such as IEEE1394 and Ethernet. By implement the

device control module with the media manager and application program instructions as disclosed in

Ludtke: col. 4, lines 12-67; into the program's instructions in **Lo**'s system as disclosed in Col. 7, Lines

28-38; the **Lo**'s system improves the ability to provide data flow management, services for client

applications between devices on the network transfer data with different data formats between domains

and protocols as disclosed in **Ludtke**: col. 2, lines 1-10.

In regard to claim 1, lines 19-22, it recites a "*transmission operation of transmitting the digital

information having the second format via the second channel*", that leaves a doubt as to the scope of the

subject matter, which applicant regards as the invention, because the person of ordinary skill in the art would not know where the destination of the "*transmitting the digital information*" is, e.g. where the "*second channel*" is connected to. Therefore, the claim will raise in question and fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 17, lines 19-20, it recites the limitation as "*is adapted to perform a transmission operation to transmit the digital information having the second format, via the second channel*", that leaves a doubt as to the scope of the subject matter, which applicant regards as the invention, because the person of ordinary skill in the art would not know where the destination of the "*transmitting the digital information*" is, e.g. where the "*second channel*" is connected to. Therefore, the claim will raise in question and fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 61, lines 19-22, it recites the limitation "*request operation of requesting the allocation of a new bandwidth in the case in which the renegotiation is possible*", that leaves a doubt as to the scope of the subject matter, which applicant regards as the invention, because the person of ordinary skill in the art would not know whether if the renegotiation is possible, why the request for allocating of a new bandwidth is needed. Therefore, the claim will raise in question and fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Allowable Subject Matter

5.   Claims 61-63 and 65 would be allowable if rewritten or amended to overcome the Response to Amendment/Arguments, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Hewitt et al. (U.S.6,151,651), **Garney et al.** (U.S.6,119,243), **Takeyasu, Masashi**

(U.S.6,295,516) and **Akatsu et al.** (U.S.6,505,255) are all cited to show devices and methods for

improving data transfer in the telecommunication architectures, which are considered pertinent to

the claimed invention.

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The

examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chau T. Nguyen can be reached on (571) 272-3126.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
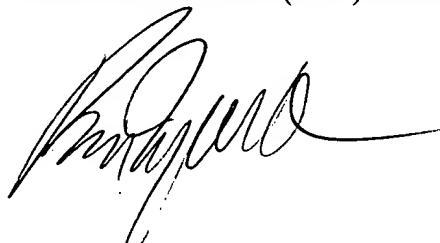Washington, D.C. 20231

or faxed to:

(571) 273-8300

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street,

Alexandria, VA 22314.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BRIAN NGUYEN
PRIMARY EXAMINER

Tri H. Phan
June 20, 2005